

U.S. Department of Energy
Office of Fissile Materials Disposition
P.O. Box 23786
Washington, DC, 20026-3786

Dear Department of Energy, Office of Fissile Materials Disposition:

I do not support plutonium processing at the Pantex Plant. In the *Surplus Plutonium Disposition Draft Environmental Impact Statement*, the Department of Energy prudently decided against locating one plutonium processing facility (MOX fuel fabrication) at the Pantex Plant. For the following additional reasons, a Plutonium Pit Disassembly and Conversion facility also should not be located at Pantex:

Pantex Should Not Become the Next Rocky Flats

Pantex has never processed plutonium. The Pantex Superfund site has so far apparently escaped the type of radioactive contamination found at plutonium processing sites like Rocky Flats in Colorado and Hanford in Washington.

Risks That Are Unknown Are Too High

The Pantex Plant occupies an area that is a fraction of the size of other plutonium sites.

| SIZE MATTERS: A Comparison of the Area of the Four Candidate Sites (Square Miles) | | | |
|---|---------------------|---------------------------------|---------|
| Pantex | Savannah River Site | Idaho National Engineering Lab. | Hanford |
| 23 | 309 | 890 | 560 |

The technologies proposed in the Plutonium Pit Disassembly and Conversion Facility are undemonstrated and unproven. It is unacceptable to have plutonium operations above the Ogallala Aquifer and only one mile from where people live and work in a vibrant agricultural producing area. The Pantex legacy already includes heavy contamination in a perched layer of groundwater less than one hundred feet above the Ogallala Aquifer. This pollution extends from under the Pantex Plant to adjacent private property and the real impacts remain unknown. The risk of any additional groundwater pollution is unacceptable in an agricultural region.

Common sense dictates that negative consequences to people and farmland from nuclear accidents are far more likely in a small, open, windy location like Pantex. The Department of Energy has acknowledged that the most visually unappealing feature of the plutonium facilities will be their smokestacks. Visual blight will be a minor inconvenience compared to the air pollutants--many of them radioactive--expected to escape into the atmosphere daily through smokestack filters. Routine air emissions of tritium, plutonium, americium, and beryllium constitute unacceptable new hazards to the Texas Panhandle.

MD045

MD045-1

Alternatives

DOE acknowledges the commentor's opposition to siting the proposed surplus plutonium disposition facilities at Pantex. As described in Chapter 4 of Volume I and summarized in Section 2.18, potential impacts of any of the proposed activities during routine operations at any of the candidate sites would likely be minor. To avoid contamination that has occurred in the past at some DOE sites, DOE would design, build, and operate the proposed surplus plutonium disposition facilities in compliance with today's environmental, safety, and health requirements. Decisions on the surplus plutonium disposition program at Pantex will be based upon environmental analyses, technical and cost reports, national policy and nonproliferation considerations, and public input. DOE will announce its decisions regarding facility siting and approach to surplus plutonium disposition in the SPD EIS ROD.

MD045-2

Human Health Risk

Although Pantex is smaller in overall size in comparison with the other candidate sites, analyses in Chapter 4 of Volume I indicate that impacts of operating the pit conversion facility on health, safety, and the environment at Pantex would likely be minor (e.g., see Section 4.6).

While it is true that the pit conversion facility is the first consolidated facility for accomplishing this mission on a large scale, the processes that would be used in this facility are not entirely new. Many of these processes are in use at LANL and LLNL. In addition, DOE has recently started a pit disassembly and conversion demonstration project at LANL, where processes will be further developed and tested.

Section 4.26.3.2 analyzes impacts to the environment (including contamination to the Ogallala aquifer) due to construction and normal operation of a pit conversion facility at Pantex. There would be no discernible contamination of aquatic biota (fish) or drinking water, either from the deposition of minute quantities of airborne contaminants into small water bodies or from potential wastewater releases. Therefore, it is estimated that no measurable component of the public dose would be attributable to liquid pathways. Appendix J.3 includes an analysis of

potential contamination of agricultural products and livestock and consumption of these products by persons living within an 80-km (50-mi) radius of Pantex. If the proposed surplus plutonium disposition facilities were located at Pantex, a very small incremental annual dose to the surrounding public from normal operations would result via radiological emission deposition on agricultural products (i.e., food ingestion pathway). This dose (about 0.56 person-rem/yr) would be 0.0006 percent of the dose that would be incurred annually from natural background radiation. This analysis indicates that impacts of operating the pit conversion facility on agricultural products, livestock, and human health at Pantex would likely be minor.

MD045-3**Human Health Risk**

It is DOE policy to operate in compliance with all applicable air quality requirements and to protect human health and the environment. DOE takes into consideration pollution reduction techniques to minimize air releases when designing, constructing, and operating its facilities. It also considers aesthetic and scenic resources in the design, location, construction, and operation of facilities. Potential concentrations of air pollutants at Pantex for the various alternatives have been estimated, considering appropriate local meteorology and other data associated with the area. Because the releases from the pit conversion and MOX facilities would be very small (see Appendix J.3.1.4), estimates of resultant radiological health risks are small. As indicated in Section 4.17.2.4, the maximum possible dose delivered to a member of the public during operations of the MOX and pit conversion facilities at Pantex would be 0.068 mrem/yr, 0.02 percent of the dose that individual would receive annually from natural background radiation. The estimated dose to the public from radiological emissions (e.g., americium, tritium, and plutonium) would be 0.077 person-rem/yr which would result in an increase of 2.9×10^{-3} LCFs over the 10-year operating life of the pit conversion facility. Any new facilities that might be built would be within existing site boundaries, and would be matched aesthetically with the current plant to limit potential visual impacts.

**There is Valid, Strong Criticism of Safety
in the Storage of Plutonium at Pantex**

Since Pantex became the nation's long-term storage location for up to 20,000 plutonium pits, promises to improve safety conditions have not happened. The U.S. Government Accounting Office and the Defense Nuclear Facilities Safety Board have issued reports critical of plutonium storage safety at Pantex. Fifty million taxpayer dollars were spent on a failed plutonium pit container program (the AT-400A) and the plan to move over 10,000 pits into a safer remodeled building (Building 12-66) has also failed.

When it comes to plutonium pit storage problems, Panhandle residents are back to square one. The plutonium remains in old, unsuitable, corroding storage containers and in 35-55 year old "bunkers" that the Department of Energy promised were for "temporary" use. Plutonium that is supposed to be stored in a stable environment now sits in the bunkers--all but three without air conditioning--even as the Texas Panhandle experiences a spell of more than 40 consecutive days of 90+ degree temperatures, and more than 20 days this summer with thermometers registering 100+ degrees. If the Department of Energy cannot accomplish the job of safely storing Pantex plutonium in the most stable environment, there is no reason to accept its unsubstantiated assurances to safely process deadly plutonium powders at Pantex.

Thank you for this opportunity to comment.

Sincerely:

*as concerns mount, I appeal to the disposition
process to remove all endogenous storage as well
as processing further unsafe nuclear environments
in Pantex site and safekeeping be initiated for the
world's peoples.*

*Mary J. Nicholson
and Leonard F. Nicholson*

*720 Westmoreland Dr.
Pampa, TX 79786*

memberships at the PEACE FARM

MD045

MD045-4

DOE Policy

DOE acknowledges the commentor's concern regarding the safe storage of plutonium pits at Pantex. DOE is committed to the safe, secure storage of pits and is evaluating options for upgrades to Pantex Zone 4 facilities to address plutonium storage requirements. DOE has addressed some of the commentor's concerns in an environmental review concerning the repackaging of Pantex pits into a more robust container. This evaluation is documented in the *Supplement Analysis for: Final Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapon Components--AL-R8 Sealed Insert Container* (August 1998). This document is on the MD Web site at <http://www.doe-md.com>. Based on this supplement analysis, the decision was made to repackage pits at Pantex into the AL-R8 sealed insert container and to discontinue plans to repackage pits into the AT-400A container.

Worker exposures estimates attributable to the decision to repackage pits in AL-R8 sealed insert containers were incorporated in the revised Section 2.18 and Appendix L.5.1.

The issues raised in this comment relate to pit storage decisions made in the *Storage and Disposition PEIS* and the *Final Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapon Components* (DOE/EIS-0225, November 1996). DOE is considering leaving the repackaged surplus pits in Zone 4 at Pantex for long-term storage. An appropriate environmental review will be conducted when the specific proposal for this change has been developed, addressing, for example, whether additional magazines need to be air-conditioned. The analysis in this SPD EIS assumes that the surplus pits are stored in Zone 12 in accordance with the ROD for the *Storage and Disposition PEIS*.

MD045-5

Nonproliferation

The goal of the surplus plutonium disposition program is to reduce the threat of nuclear weapons proliferation worldwide by conducting disposition of surplus plutonium in the United States in an

environmentally safe and timely manner. In late July 1998, Vice President Gore and Russian Prime Minister Sergei Kiriyenko signed a 5-year agreement to provide the scientific and technical basis for decisions concerning how surplus plutonium will be managed. This agreement enables the two countries to explore mutually acceptable strategies for safeguarding and dispositioning surplus plutonium. During the first week of September 1998, Presidents Clinton and Yeltsin held a Moscow summit and signed a statement of principles with the intention of removing approximately 50 t (55 tons) of plutonium from each country's stockpile.

The remainder of this comment is addressed in response MD045-4.